# 8. Joan

**Program Name: Joan.java** **Input File: joan.dat**

Joan really enjoys her programming class but her true passion is the English language. However, programming has caused her to view English writings somewhat differently and she realizes that words are simply pieces of data put together carefully to create a desired meaning. For now, she has decided to practice her programming skills by creating a program to perform a very simple analysis of relatively small pieces of prose.

Joan has big plans for analyzing written pieces but decided to start with a program that simply counts the number of words in a sample of prose and calculate the average length of all words.

**Input:** A sample of English prose with an unknown number of lines containing an unknown number of whitespace-separated words on each line. The number of lines will be in the range [2,25]. Words may consist of both uppercase and lowercase letters and there are no non-letter symbols or numbers.

**Output:** A single line containing the number of words and the calculated average length of all words, formatted exactly as shown below in the sample output. The average length is rounded to the nearest whole number.

**Sample input:**

```
Joan really enjoys her programming class but her true passion is the English language
However programming has caused her to view English writings somewhat differently
and she realizes that words are simply pieces of data put together carefully to
create a desired meaning For now she has decided to practice her programming skills
by creating a program to perform a very simple analysis of relatively small pieces of
prose
Joan has big plans for analyzing written pieces but decided to start with a program
that simply counts the number of words in a sample of prose and calculate the
average length of all words
Input A sample of English prose with an unknown number of lines containing an
unknown number of whitespace separated words on each line The number of lines will be
in the range Words may consist of both uppercase and lowercase letters and there are
no nonletter symbols or numbers
Output A single line containing the number of words and the calculated average length
of all words formatted exactly as shown below in the sample output The average length
is rounded to the nearest whole number
```

**Sample output:**

```
189 words with an average length of 5 letters
```